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Professional Learning Networks: harnessing collaboration to achieve the scale-up of effective education practices

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Abstract

The emergence of networks within education has been driven by a number of key factors. These include: the complex nature of the issues facing education, which are typically too great for single schools to tackle by themselves; changes to educational governance structures which involve the dismantling of old ways of working and the introduction of new approaches with an individualized focus; as well as the increased emphasis on education systems that are 'self-improving and school-led'. Within this context, the realization of teacher and school improvement actively emerges from establishing cultures of enquiry and learning, both within and across schools. Since not every teacher in a school can collaboratively learn with every other teacher in a network, the most efficient formation of networks will comprise small numbers of teachers learning on behalf of others.

Within this context, Professional Learning Networks (PLNs) are defined as any group who engage in collaborative learning with others outside of their everyday community of practice; with the ultimate aim of improving outcomes for children (Brown and Poortman, 2018). This broad definition encompasses a huge range of between-school or school-plus-other-organization network types, including data use teams and research learning networks.

Research suggests that the use of PLNs can be effective in supporting school improvement. In addition, PLNs are an effective way to enable schools to collaborate to improve educational provision in disadvantaged areas. Nonetheless harnessing the benefits of PLNs is not without challenge. In particular, participation in learning networks does not automatically improve teaching practice or student outcomes. Correspondingly, this encyclopedia entry explores the notion of PLNs in detail; it also sheds light on the key factors and conditions that need to be present if PLNs are to lead to sustained improvements in teaching and learning. These factors and conditions are: *focus, collaboration, reflective professional inquiry, individual/group learning, and leadership*.

Introduction

The emergence of learning networks within education has been driven by the coming together of a number of key factors and trends. First is the interconnected and pervasive nature of the issues facing education today (Díaz-Gibson *et al.*, 2017). For example, the requirement on schools to close attainment gaps between different groups of children (e.g. gaps between affluent and disadvantaged students). Typically the nature of such problems makes them too great and too complex for individual schools to tackle effectively by themselves. At the same time, changes to educational structures have seen the dismantling of old ways of working, such as the provision of top down support for school improvement, and the introduction of new approaches with an individualized focus. The result is an increased emphasis on education systems that are 'self-improving and school-led'; with a concomitant

focus on school leaders themselves to drive forward school improvement. Accompanying this focus is the emerging notion that the realization of teacher and school development actively results from establishing cultures of enquiry and learning. At the same time, the school as a unit has become too small in scale and too isolated in nature to provide rich professional learning environment for teachers (Jackson and Temperley, 2006). Schools therefore need to be working smarter together (and with others) rather than harder alone, to both learn with and support one another (ibid). As a result, achieving system self-improvement requires networks of teachers who come together (with other key partners) to collaboratively learn and to share this learning. However, since not every teacher in a school can collaboratively learn with every other teacher in a network of other schools, the most efficient formation of networks will comprise small numbers of teachers who learn collaboratively on behalf of others

What are Professional Learning Networks?

Conceptualizing the notion of learning networks more formally, Brown and Poortman (2018) define *Professional Learning Networks* (PLNs) as any group who engage in collaborative learning with others outside of their everyday community of practice, in order to improve teaching and learning in their school(s) and/or the school system more widely. Brown and Poortman's (2018) definition of PLNs is multifaceted and so encompasses a vast range of between-school or school-plus-other-organization network types. These include data use teams, multi-site lesson study teams and research learning networks. Importantly PLNs can also vary in composition, nature and focus: they may consist of teachers and/or school leaders from different schools, teachers with local or national policymakers and many other potential combinations. In many cases networks will also form in partnership or engage in joint work with academic researchers. It can be seen from this definition that PLNs are focused on driving improvements in teaching and learning, which is the core stuff of education. This means that the aims of any given PLN could range from exploring and seeking to improve specific teaching practices and their outcomes, to engaging in a critical examination of the purpose and the aims of the curriculum. Ultimately the focus of the PLN will be determined by the leaders of participating schools as well as the PLN participants themselves; with their values and motivations instrumental in deciding what PLNs are used to achieve.

How effective are PLNs in improving teaching and learning?

Research evidence suggests that the use of PLNs can be effective in supporting school improvement (Brown and Poortman, 2018). In particular, studies suggest that – because it facilitates the effective sharing of knowledge - teacher collaboration in learning networks can lead to the professional learning of teachers. In turn such learning can result in: improved teaching practice, an improved potential to innovate amongst participating schools and increased student learning and outcomes, especially in disadvantaged areas (where exposure to new knowledge and innovation is typically limited) (e.g. see Vescio, Ross & Adams, 2008 amongst others). Nonetheless, despite this understanding that PLNs can significantly contribute to improved teaching and learning, harnessing the benefits of learning networks is not without challenge. In particular it is noted by Brown and Poortman (2018) that participation in learning networks will not *automatically* improve practice; the effects can sometimes be small and results have been mixed.

The sustainability of PLNs

Considering the success of PLNs more closely, key to effective networks is their ability to sustain over time; with at least three years suggested as the minimum time required to achieve meaningful improvement to children's outcomes. But networks can only be considered effective if they also serve to sustain change over time. Specifically, the notion of sustainability in relation to PLNs should be regarded as

a function of whether schools' engagement in PLN activity results in lasting school-wide changes in school policy and practice (Hubers and Poortman, 2018). As Hubers and Poortman (2018, p.194) succinctly observe, the goal of a PLN is never simply to be a professional learning network, rather, a PLN is a means to an end. Furthermore, Hubers and Poortman (2018) argue that any PLN should be considered to promote sustained school improvement when it meets three key criteria. The first is that engagement in a PLN can be considered sustainable when long-term changes occur to both participants' behavior as well as to the practices of teachers located within participants' schools. This means, for example, that teachers apply and continue to improve the products and outcomes of the PLN (for instance lesson materials, tools, protocols and so on), and that this work is facilitated by their school as a whole. For instance, it is embedded in the school culture and appropriate school level support is available. The second criterion for sustainability is that these changes in behaviors can be demonstrated as positive outcomes. As Hubers and Poortman (2018) argue, why would schools continue to work with PLNs if desired outcomes are not being met? The third criterion for sustainability is all involved displaying 'agency'. In other words, both participants and those in their school are active change agents rather than passive followers or implementers. This means teachers with connections to PLNs (whether participating in the PLN or not) should be continuously working towards further improving the nascent, initial outputs of PLNs.

Hubers and Poortman (2018) also suggest that a number of supporting conditions need to be attended to by practitioners and policy makers in order to ensure PLNs can successfully drive sustainable difference. These conditions are *focus*, *collaboration*, *reflective professional inquiry* and *individual/group learning*. In addition is the preeminent role of *leadership*. Here leadership refers both to leadership of networks themselves, to ensure that they function effectively (and that the conditions described above are enabled and supported); also to ensure that there is a meaningful two way link between the network and participating teachers' 'home' schools. Extant literature suggests these conditions are salient across contexts and, drawing on (Hubers and Poortman, 2018, p. 196), we now explore them in more detail, below:

The first condition that can support sustained school improvement through school and teacher engagement in PLNs is *focus*. This condition plays out on (at least) two levels. At the level of the PLN, focus refers to having a shared sense of purpose amongst the individual PLN members in relation to the specific goals of the PLN. While every member does not need to share exactly the same goal or reason for participating in the PLN, the more these goals are aligned and the more PLN members agree on the reasons why they are working together, the easier it will be to maintain a conducive and productive environment and to ensure everyone's expectations are met. The second level at which focus plays out is in terms of the link between PLNs and the individual participating schools. Here, focus refers to more than just having a shared sense of purpose among the PLN members, their colleagues and the school leaders; it also refers to agreeing to prioritize the PLN above the other demands and priorities faced by the school. Thus, PLN members must be supported in relation to some of their other tasks (e.g., teaching supply is provided) to enable them to work effectively within the PLN. This second type of focus is thus essential in order to sustain the first.

The second supportive condition is *collaboration*. PLNs function through establishing networks of formal (e.g., schools, hospitals, agencies, etc.) and informal (one-to-one social interactions) relationships between entities and people, thereby creating an interconnected approach to important and persistent educational issues. The diversity of knowledge, skills, and capacities that each network participant provides represents a vital organizational asset that can be made available to others (Díaz-Gibson *et al.*, 2017). It is effective collaboration however that enables the social capital available with networks to be

harnessed. At the same time, there are many ways to collaborate and not all of them are always effective. This means there is a lot yet to be learned about professional collaboration and the conditions under which it provides benefits for professional practice and student achievement. What is known, however, is that effective collaboration is grounded in the level of trust that exists between participants and ongoing and open disclosure about problems and challenges. Trust often materializes more quickly when networking takes place between schools with similar/homogenous quality features and similar context factors. Related is that geographical proximity often serves to act as a delineating boundary for approaches to collaboration and improvement amongst networks. For instance a geographic focus might engender 'closeness', which makes it easier for participants to physically come-together, but also in terms of shared community, aspirations and needs. Such factors again help to foster trust.

The third condition is *reflective professional inquiry*, which refers to the conversations teachers have about serious educational issues or problems. Teachers should be actively and collectively questioning ineffective teaching routines while finding proactive means to acknowledge and respond to them. Likewise, explicit attention to both *individual and group learning* (the fourth condition) too promotes effectiveness. For example, individual members' prior knowledge and motivation will influence their own learning. These also influence the team's progress, however. For instance, having individual members with various backgrounds, can be experienced as impeding if some members are (or rapidly move) ahead in their thinking and learning in relation to the focus area, or are generally more motivated to spend time on PLN activity. At the same time, any variation in backgrounds can also prove to be an advantage if different perspectives can provide input for discussion and reflection, enabling all participants to learn. In turn, progress made and activities undertaken by the PLN will also influence individuals, which leads to self-reinforcing learning loops.

The final, and most important, condition is *leadership*. In the first instance, leadership is required of the networks themselves to ensure that they function effectively. Second, however, it is also the role of school leaders to ensure that there is meaningful participation by their teachers in network activity and that this participation makes a difference within teachers' 'home' schools. Of these two aspects of leadership, it is that latter that is explored in this entry. To begin with, school leaders must want their schools to actively engage with the work of the PLN. In other words, school leaders must want to reach out beyond the boundaries of their schools and for their teachers to engage in collaborative endeavors with others. Effective engagement with PLNs thus requires school leaders to adopt a very external focus and to couple their desire to do the best for their students with a recognition that this can often best be served through collaborative work. Typically such recognition is achieved through a combination of changes in system drivers - such as accountability frameworks - to support new ways of working, as well as approaches to help school leaders to understand the benefits of collaborative engagement and how such engagement links to their existing ethos and values. Coupling an external focus with their moral driver for their students results in a requirement for school leaders: 1) sign up to the common purposes of the network and the focus area of networked activity (see condition 1) above); 2) recognize that, to ensure the successful ongoing operation of the network common resources might need to be established (e.g. new resource generated or existing resourced transferred) and that this resource will need to be maintained over time); 3) acknowledge a moral obligation towards, and an acceptance of collective responsibility for, the outcomes of all children in all schools within the network. In other words, schools engage in networks to gain in terms of their teacher's learning but also to support teachers in other schools with their learning requirements; 4) finally, it is argued by Di'az-Gibson *et al.*, (2017, p.1044) that networked leadership represents a form of nonhierarchical leadership, where information and expertise substitutes for authority and the actualization of leading is a self-organizing process. Since network leaders and participants will not necessarily also be formal leaders, school

leaders are required to recognize that distributed leadership needs to be enabled to flourish (Jackson and Temperley, 2006). This means that PLN participants are supported to engage in networked activity and to lead change within their own school. This represents a stark contrast to many schools where often the impetus for change and the introduction of new ideas comes from the school leader themselves.

Once prepared to engage in networked forms of learning, specific approaches designed to maximize the benefit to their school are school leaders' functions of *formalizing*, *prioritizing* and *mobilizing*. First, teachers and schools face a myriad of competing priorities. At the same time, school leaders are responsible for direction setting: deciding on the activities that should be focused on and signaling these to ensure common understanding. In this light, the notion of *formalization* relates to the need for school leaders to cement their school's and teacher's participation in the PLN by ensuring that: 1) the activity of the PLN corresponds to the improvement priorities and vision for the school; 2) PLN participation remains a key focus of the school, and that its importance is recognized (also see condition 1, above). *Prioritizing* engagement in PLN activity, meanwhile, concerns ensuring adequate resources exist to allow the work of the PLN to get done. While engaging in learning networks can be beneficial, for this to occur, school leaders must be prepared to provide opportunities for such engagement, and this requires an intentional commitment of resources. Finally, the aim of the PLN is to engender the development and spread effective practice. It is rare however that new knowledge automatically spread through schools, or innovations immediately adopted by teachers. School leaders also need, therefore, to understand how the knowledge and innovation that emerges from networked learning can be best *mobilized*: brokered using boundary objects so ensuring that other teachers and educators within their school engage with and adopt such innovation - with teaching and learning benefiting as a result.

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Cross references

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